

STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE

GOVERNOR

EUGENE A. CONTI, JR.

SECRETARY

June 16, 2011

To: Molly C. Mathewson, P.E.
Ramey Kemp & Associates, Inc.
5808 Faringdon Place, Suite 100
Raleigh, N.C 27609

Subject: Proposed Wilco Hess – NC 55 Development Traffic Impact Analysis Review

The proposed Wilco Hess Development site, developed by WilcoHess LLC, is located approximately 1,500 feet on the northwest quadrant of the NC 55 and Sedwick Road intersection in Durham County, North Carolina. The proposed development will consist of 3,750 square foot convenience mart with 16 fueling stations with an anticipated build-out year of 2012 and analysis year of 2013. The proposed development is projected to generate an unadjusted volume of 8,682 daily trips with 266 A.M. peak hour site trips and 306 P.M. peak hour site trips.

The TIA analyzed the following one (1) intersection:

- NC 55 and Site Drive #1 - Unsignalized

Approved Surrounding Developments

1. Alphin Commercial

This proposed project is to be located on the eastside of NC 55, just south of Allendown Drive in Durham, NC. The development proposes to consist of a 4,500 square foot Fast food Restaurant with Drive Through, a 7,500 square foot Quick Lube Station, and a 40,000 square foot Shopping Center. According to the site layout, access to the development is proposed via one (1) full movement driveway onto NC 55. It is anticipated to be built out in 2011.

2. Kitt Creek Commons

This proposed project is to be located on the eastside of NC 55 in Durham, NC. The development proposes to consist of two 3,000 square foot Fast food Restaurants with Drive Through and 57,000 square foot retail outparcel with a site access via one (1) full movement driveway onto NC 55. The development was anticipated for build out in 2009.

TIP Roadway Improvement Projects Relevant to Proposed Development

- There are no funded NCDOT TIP roadway improvement projects in the vicinity of the study area.

Trip Generation and Distribution

- 50% to/from the north via NC 55
- 50% to/from the south via NC 55

Capacity Analysis for Existing and Future Conditions

- Existing (2011) Conditions
- Projected (2013) No-Build Conditions (Existing traffic + 3.0 % Background Growth)
- ~~Projected (2013) Build Improved Conditions (Existing traffic + 3.0 % Background Growth + Site Traffic With Improvements)~~

Summary of Road Improvements

The Department has reviewed the preliminary site plan and Traffic Impact Analysis (TIA) for the Wilco Hess- NC 55 Development prepared by Ramey Kemp and Associates, Inc. (Sealed and dated April 29, 2011). In order to accommodate the site-generated traffic safely and efficiently, while also attempting to protect the functional integrity and operational capacity of the adjacent roadway facilities, we require the following improvements and/or restrictions related to this development. Any additional changes to the site plan must be submitted in writing to the District Office.

NC 55 and Site Drive #1 Intersection

Eastbound Site Drive #1

- Construct a three (3) lane cross-section consisting of one (1) ingress lane and two (2) egress lanes. The egress lane should provide for exclusive right and left-turn movement. Provide a minimum of 100 feet of protected internal storage before crossing maneuvers and parking are allowed.

Southbound NC 55

- Construct an exclusive right turn lane with appropriate storage and taper.

General

Cross-access to adjacent properties is strongly encouraged to reduce repetitive trips and provide future alternative routes of ingress/egress.

Due to, but not limited to, the comments and recommendations from this review of the proposed developments, changes in the internal circulation may be necessary to ensure that driver confusion is minimized to the maximum extent possible.

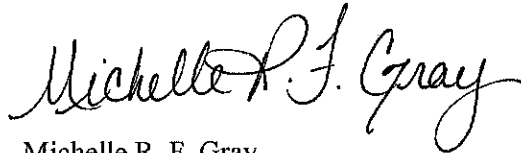
Any pavement marking revisions/modifications necessitated by the development should be the responsibility of the developer and coordinated with the Division Traffic Engineer.

Any roadway modifications or improvements necessitated by the development should be the responsibility of the developer unless otherwise noted.

Reference should also be made to the information included in the "General Recommendations Attachment."

An NCDOT driveway permit will be required for driveway access on NC 55. Once the driveway permit has been approved and issued, a copy of the final driveway permit requirements should be forwarded to this office. If we can provide further assistance, please contact me at (919) 220-4750.

Sincerely,

A handwritten signature in black ink, reading "Michelle R. F. Gray". The signature is fluid and cursive, with the first name "Michelle" being the most prominent part.

Michelle R. F. Gray
Assistant District Engineer

Attachment

cc: Mr. H. Wesley Parham, P.E.

General Recommendations Attachment
(For Wilco Hess-NC 55 Development)

Adequate horizontal and vertical sight distances should be reserved at all proposed entrances. Foliage that interferes with sight distance should be cut back to protect lines of sight. The District Engineer should determine if all drainage facilities are adequate. Curb cuts and curb ramps should be constructed in conformance with the "*Guidelines for Curb Cuts and Ramps for Disabled Persons*," if applicable.

The developer may be required to obtain an approved encroachment agreement covering proposed work within the state right-of-way. If this is the case, the encroachment should be cross-referenced to this review.

All street and driveway entrances onto state system roadways should be controlled with appropriate traffic control devices, including but not limited to, stop, yield, directional, regulatory, and advisory signs and pavement markings. All traffic control devices shall conform to the requirements set forth in the Manual on Uniform Traffic Control Devices. Final pavement marking and signing plans should be submitted to the Division Traffic Engineer for approval prior to the installation of any signs and/or pavement markings.

Unless otherwise noted, a recommended width of 40 feet (curb face to curb face) should be used at each drive. It is also recommended that 40 feet (minimum) radii should be used at each drive to accommodate any service type vehicles or truck traffic that may visit the site.

If the developer anticipates adding or petitioning for addition to the state system, all roads/streets should be designed and constructed in conformance with the current North Carolina Department of Transportation design and construction guidelines.

All "outparcels" or "excluded areas" should be served internally with no additional access onto abutting roadways. The developer should convey this condition in any lease or sell agreements.

As required by the "*Policy on Street and Driveway Access to North Carolina Highways*," dated July 2003, the applicant is responsible for identifying all right-of-way and/or control-of-access limits and for including this information on all submittals. Failure to accurately disclose R/W and C/A limits could result in the denial or closure of access points.

Adequate right-of-way for widening and sight distance triangles should be reserved. Consideration should be given to the possible future need for signalization and associated span poles, controller and pad, and guy wires at the intersections.

Any additional development, either within this site or adjacent to this site, that intends on using this development's access will require an updated driveway permit and re-evaluation of geometric and traffic control needs.

All widening should include appropriate transitional and deceleration tapers. Recommended turn lane and transitional treatments are shown on pages 78 and 79 of the "*Policy on Street and Driveway Access to North Carolina Highways*," dated July 2003.

Where possible, opposite side driveways should be aligned to prevent the operational and safety problems caused by offset driveways.